

L-column ODS-P

Wide pore C18 column for analysis of protein and peptide

Average particle size 5 μm
 Average pore size 300 \AA
 Range of pH pH2–9
 USP category L1

L-column ODS-P is ideal for the analysis of proteins and peptides. The base silica has a pore diameter of 300 \AA . Adsorption is minimized and proteins and peptides elute with sharp peaks. Biological samples are often analyzed using 1 % TFA in the mobile phase and **L-column ODS-P** is exceptionally stable in strongly acidic mobile phase.

■ Role of Pore diameter in protein and peptide analysis

Insulin B chain with a molecular weight of 3495 does not show different peak shape between 120 \AA pore diameter and 300 \AA pore diameter (Fig. 19). Retention is determined by carbon load. On the other hand, myoglobin with a molecular weight of 17400 shows a broad peak when analyzed on the 120 \AA **L-column ODS** and the main component is not separated from the impurities. Using 300 \AA **L-column ODS-P** with 300 \AA pore diameter, the main component is separated from the impurities with good peak shape. Analytes of molecular weight of approximately 5000 to 20000 are suitable for this column.

■ High durability

L-column ODS-P can be used in a pH range from 2 to 9. It demonstrates long lifetimes and stable performance in mobile phases containing 1 % TFA (Fig. 20).

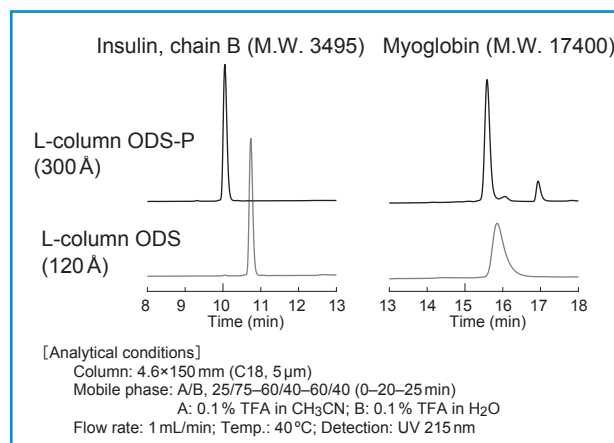
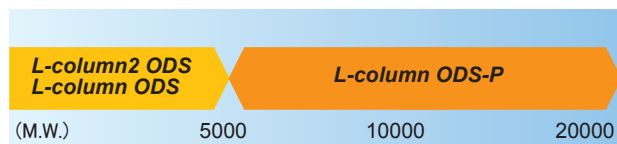


Fig. 19 Peptide and protein analysis using packing materials with different pore diameters.

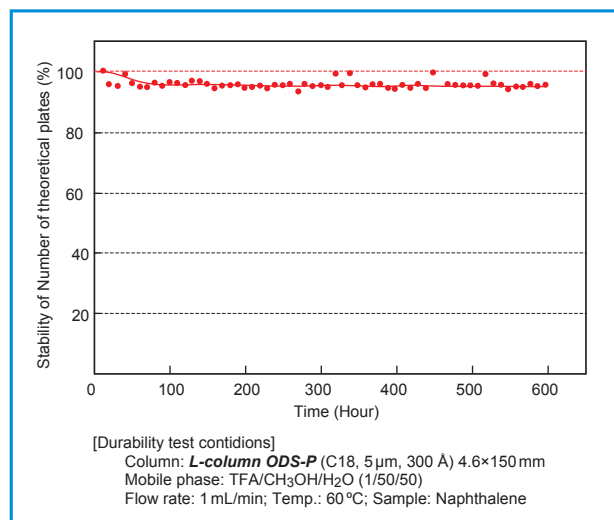


Fig. 20 Durability test with acidic mobile phase.